

## ABSTRACT

A spacer grid used for placing and supporting fuel rods in nuclear reactor fuel assemblies is disclosed. The spacer grid 5 of this invention has a plurality of inner strips intersecting each other to form a plurality of guide tube cells and a plurality of fuel rod cells, with a plurality of mixing blades projecting upward from the inner strips at intersections of the inner strips. The spacer grid further includes a plurality of 10 perimeter strips to encircle the intersecting inner strips. Each of the perimeter strips is fabricated with a plurality of unit intermediate strips and a plurality of unit corner strips, with a grid spring provided on each of the unit strips. The grid spring includes a vertical opening formed at a central 15 area of each of the unit strips, a vertical support part extending vertically between the central portions of top and bottom edges of the vertical opening, and a fuel rod support part provided at a central portion of the vertical support part while being bent to have an outward rounded cross-section. The 20 vertical support part is bent at two steps, and the fuel rod support part is bent to be in equiangular contact with each of the fuel rods, thus accomplishing a uniform contact pressure distribution when the fuel rod support part is in contact with each of the fuel rods.